

BEFORE THE

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

In the Matter of Whether Broad)
Authorization may be provided)
Under 29.604 (6r), Stats.,)
to Incidentally Take an Animal Species)
that is Listed as Threatened.)

The Wisconsin Department of Natural Resources (Department) listed the Butler's gartersnake (*Thamnophis butleri*) as a State-Threatened species in 1997 due to extensive habitat loss within its very limited range and the integradation with a similar species, the eastern plains gartersnake (*Thamnophis radix*). Since that time, the Department has increased its understanding of the habitat requirements of the snake and the continued loss of suitable snake habitat. At the same time, conflicts between land development and snake conservation continue due to the coincidence of the snake's limited range with the rapidly developing metropolitan Milwaukee area. Twenty projects were authorized for incidental take of the Butler's gartersnake between 1997 and July 2004. No other Threatened or Endangered species has had more than one authorization.

The Department requested incidental take authorization for projects that result either in temporary disturbance to suitable Butler's habitat or permanent loss of suitable habitat providing only minimal conservation value to the overall status and recovery of the snake. The incidental take that occurs for such projects is not believed to have a negative effect on the overall status and recovery of the species. Only authorization to incidentally take the State- Threatened Butler's gartersnake for projects that result in temporary disturbance to suitable Butler's habitat is granted as described herein. The remainder of the incidental take authorization dated April 27, 2004 remains under formal review.

FINDINGS OF FACT

1. The rarity of the Butler's gartersnake and the continued development pressure within its range necessitates a streamlined process for reviewing and planning projects that have limited impact to the species.
2. The Department entered into formal State Agency Consultation under s. 29.604, Stats., in 2004 to develop broad incidental take authorization for the Butler's gartersnake for projects that do not inhibit or compromise the long-term conservation and recovery of the species and for projects that only temporarily impact suitable habitat.
3. The Department developed a draft Incidental Take Authorization dated February 18, 2004 and updated the draft on April 27, 2004. The draft outlined the Department's proposal to broadly authorize incidental take of the Butler's gartersnake and included projects that result in temporary disturbance of suitable Butler's habitat and permanent loss of habitat on sites that provide only minimal conservation value to the snake. This current authorization covers only those projects that may result in temporary habitat disturbance – the remainder of the proposed incidental take authorization is still under formal review.

4. Temporary Habitat Disturbance is defined as a disturbance of Butler's gartersnake habitat that will be restored to its pre-activity condition or a condition that improves habitat for the Butler's gartersnake following completion of the activity. Incidental take of the State-Threatened species would likely occur as a result of the proposed project but is expected to be minimal. Examples of such projects include above ground and underground utility installations, structural replacements, facility maintenance and other activities as determined by the Department. The Department has required monitoring on several of these projects to date and it appears that mortality related to construction is insignificant and does not compromise the affected Butler's population. In some instances, habitat quality can be increased when the utility corridor is restored to open canopy conditions or where it provides habitat connectivity between isolated Butler's populations.

This Authorization also covers impacts that occur as a result of maintenance activities of utility facilities. These activities must have a limited and temporary impact to suitable habitat and be conducted according to the management guidance below as appropriate. Maintenance activities include but are not limited to the following:

- a. Vegetation management activities
- b. Ground line inspections
- c. Right-of-way inspections
- d. Soil borings for footing design of structure replacement
- e. Emergency Repairs
- f. Other maintenance activities that have a minimum environmental impact to the Butler's gartersnake as determined by the Department

5. The following definitions apply to the authorization described herein:

- a. "Suitable habitat" and "suitable habitat patch" mean undeveloped areas that include both wetland and adjacent upland habitat suitable to the Butler's gartersnake. Patch size is determined by non-isolated suitable habitat and not limited to a specific project site. Suitable Butler's gartersnake habitat includes:

- (1) wetland habitat of any classification except permanent open water. Lakes, streams, and deep ponds are not considered suitable, nor are permanent stormwater management ponds. A 100-foot edge of forested wetland where it abuts or is adjacent to suitable upland habitat is also considered suitable.
- (2) upland habitat within 300 or more feet of over-wintering wetlands, with intact ground vegetation (grasses, forbs), and less than 75% canopy closure. Upland habitat must be directly connected to suitable wetland in at least one location.

Note: For instance, habitat not considered suitable includes closed canopy forests where ground vegetation is very sparse, lawns, and fields in active agriculture; but fields previously devoted to agriculture or other uses with significant invasion of woody shrubs and trees are suitable if grasses and forbs are largely intact. Lawns and fields in active agriculture row crops or in crop rotation are not considered

suitable. Fields that remain fallow for more than one year may be considered suitable habitat. Pastures will be included as suitable habitat if more than 50 percent of the acreage has an eight-inch or greater canopy height.

- b. "Good quality suitable habitat" means habitat with less than 50% of the wetland component dominated by dense cattail (*Typha* sp.) beds or dense stands of exotic species (i.e. reed canary grass (*Phalaris arundinacea*); purple loosestrife (*Lythrum salicaria*); giant reed grass (*Phragmites* sp.)) and/or less than 50% of the ground cover (grasses and forbs) in the upland habitat component is relatively sparse and likely to become sparser through ongoing natural succession.
- c. "Moderate quality suitable habitat" means habitat with more than 50% and less than 75% of the wetland component dominated by dense cattail (*Typha* sp.) beds or dense stands of exotic species (i.e. reed canary grass (*Phalaris arundinacea*); purple loosestrife (*Lythrum salicaria*); giant reed grass (*Phragmites* sp.)) and/or more than 50% and less than 75% of the ground cover (grasses and forbs) in the upland habitat component is relatively sparse and likely to become sparser through ongoing natural succession.
- d. "Poor quality suitable habitat" means habitat with more than 75% of the wetland component dominated by cattail (*Typha* sp.) beds or dense stands of exotic species (i.e. reed canary grass (*Phalaris arundinacea*); purple loosestrife (*Lythrum salicaria*); giant reed grass (*Phragmites* sp.)); and/or more than 75% of the ground cover (grasses and forbs) in the upland habitat component is relatively sparse and likely to become sparser through ongoing natural succession.
- e. "Isolation" means a site that does not exchange genetic material with other sites because of physical separation from other suitable habitat patches. Barriers include physical structures such as paved roads, parking lots and walls that are impassable to the snakes; or resistant terrain, such as mowed lawns, golf courses, forests or agricultural fields that a snake could physically pass through, but would do so only occasionally with risk of predation, desiccation, and lack of shelter from the elements. Resistant terrain is considered impassable if it extends over 1,000 feet from suitable habitat.
- f. "Tier 1 – minimal conservation value site" means a site of less than 10 acres, regardless of habitat quality, or a site of less than 20 acres with poor habitat quality.
- g. "Tier 2 – moderate conservation value site" means a site of 10 or more acres but less than 20 acres with moderate to good suitable habitat quality, or a site of 20 or more acres but less than 30 acres with poor to moderate suitable habitat quality.
- h. "Tier 3 – significant conservation value site" means a site of 20 to 30 acres with good quality suitable habitat, or a site of greater than 30 acres with any quality of suitable habitat.

6. The persons and entities covered by this authorization agree to fully implement the following conservation measures for the purpose of minimizing any adverse effects on the Butler's gartersnake:
- a. **For non-land management activities:** Identify and map all suitable Butler's gartersnake habitat that will be disturbed by the proposed project and the total acreage of the contiguous suitable habitat patch on aerial photos. The aerial photos should be as recent as possible and must be dated. The goal of the mapping is to demonstrate how significant incidental take will be (see a.(1) through a.(3) below).
 - (1) If project involves a habitat patch classified as having Minimal Conservation Value, then no additional conditions are required.
 - (2) If project includes a patch of Moderate or Significant Conservation Value AND project affects less than 20 percent of the contiguous suitable habitat patch regardless of time of year, then no additional conditions are required.
 - (3) If project includes a patch of Moderate or Significant Conservation Value AND project affects more than 20 percent of the contiguous suitable habitat patch, then the following conditions must be followed:
 - (a) If the disturbance will occur in suitable upland habitat adjacent to Butler's over-wintering wetlands, install snake exclusion fencing (trenched in sediment fencing) along the perimeters of suspected over-wintering wetlands prior to March 15 (see Figure 1). If project timing does not allow for placement of fencing prior to March 15, then fencing should be placed prior to construction.
 - (b) Or, if the disturbance involves an over-wintering wetland, install fencing along both sides of disturbance corridor prior to construction (see Figure 2).
 - (c) Install and maintain fence appropriately as outlined in the Wisconsin Best Management Practices for Construction Sites:
 - Snake exclusion fencing shall include snake "turnarounds" at all ends to prevent snakes from going around the ends of fences or through openings. From a top view, these wings look like loops that loop back away from the opening at a rounded 180-degree turn (Figures 1 and 3 below).
 - Snake Exclusion fencing stakes shall be installed on the up-slope side to

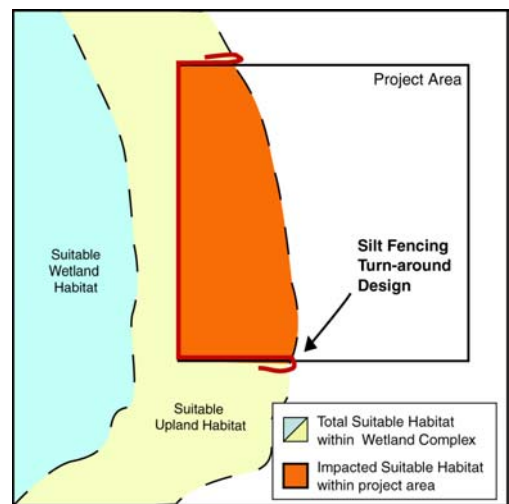


Figure 1. Snake Exclusion Fencing Diagram

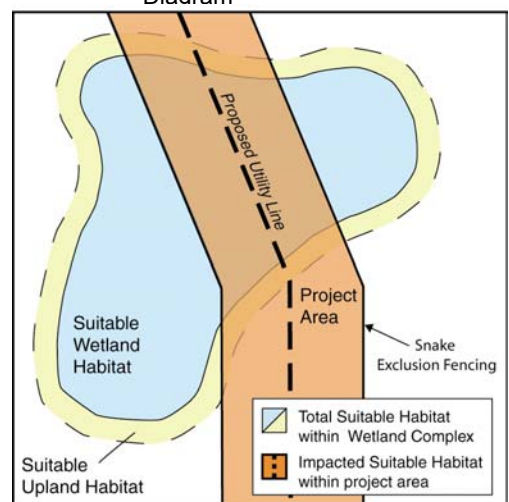


Figure 2. Suitable Habitat Diagram for Butler's gartersnake

prevent snakes from climbing over the fencing. This is opposite the normal placement method for sediment fencing.

- All fences must be inspected at least twice weekly on non-consecutive days or after significant rain events (3/4-inch downpour or 1.5 inches of rain in any 24-hour period). Repairs to fencing must be made within 24 hours.
- For powerline towers that will be repaired after March 15, snake exclusion fencing shall be installed around any powerline towers that are in uplands and within 300 feet of a wetland prior to March 15. For upland sites, the fencing should be installed in a U-shaped pattern with the bottom of the U facing the wetland that is within 300 feet of it.

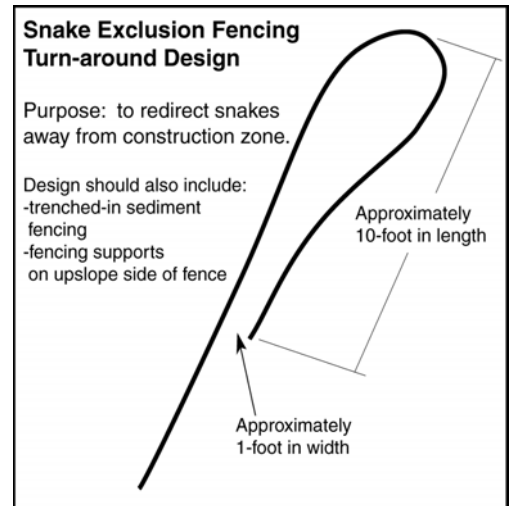


Figure 3. Turn-around Design for Snake Exclusion

- (d) If construction occurs when the ground is not frozen, removable pads or mats shall be used in wetlands to support equipment and minimize wetland disturbance.
 - (e) Equipment staging areas established in suitable Butler's habitat shall be delineated and fenced off (using trenched in sediment fencing). Access openings shall be as narrow as possible and the fences should have turn-arounds at these entry points that cause the snakes to be directed away from the openings (see Figures 1 and 3).
- (4) All lands covered under this Authorization and impacted by the project shall be restored to their original condition that existed prior to the activity or result in improved habitat conditions for the Butler's gartersnake at the conclusion of the project, as determined by the Department. In some cases, the disturbed areas will be restored naturally from surrounding habitat. In others, the areas will need to be actively restored to the same or better condition that existed prior to the activity. Invasive species and water quality issues need to be evaluated and should be factored into any resultant restoration plan

- b. **For land management activities:** If project includes maintenance activities that will result in limited and temporary disturbance of suitable Butler's gartersnake habitat (see above), the management protocols below must be followed.

To maintain suitable habitat for the Butler's gartersnake, partial mowing or burning of the suitable upland habitat should be conducted at least once every 3-5 years to suppress natural succession.

(1) Burning:

- (a) If burning will be done between November 6 – March 15, there are no restrictions.
- (b) If burning will be done between March 16 – November 5, then only up to 25% of the available grassland habitat for that site (*see definition*) should be burned in any one year.

(2) Mowing/Haying:

- (a) Herbaceous mowing and brush-mowing should be done as follows:
- (b) Conduct mowing in small patches in a monthly rotational pattern, with no more than 33% of the available grassland habitat on the site (*see definition*) affected in any one year.
- (c) Mower blades should be set a minimum of 8 inches off the ground.
- (d) Conduct mowing when weather conditions are most likely to avoid snake activity:
 - during the hottest period of the day when sunny conditions prevail and air temperatures exceed 80° F, OR
 - on very cool, overcast days when temperatures are below 50° F

(3) Selective Brush/Tree-Cutting:

- (a) Selective cutting (e.g. chain saw) may be done without restriction.

(4) Grazing:

- (a) Light-to-moderate grazing (<1.0 head per acre) may be used in rotations among habitat patches, with no more than 33% of the available habitat on the site (*see definition*) grazed in any one year. Grazing should be discontinued in a patch as soon as 50% of the grasses and forbs in a grazed patch are cropped to 8 inches in height. For heavier grazing, contact Bob Hay (608-267-0849) at the Bureau of Endangered Resources.

(5) Herbiciding:

- (a) To the maximum extent possible, herbiciding should occur during the snake's dormant period (November 6 - March 15).
- (b) Where active season herbiciding is necessary to control herbaceous vegetation, spot treat, preferably with a low persistence/short half-life herbicide (e.g. Round-up®), using wick, sponge or hand-held spray applications, not

broadcast spraying. Basal-bark or cut-stump treatment methods should be used when treating woody vegetation.

7. Incidental take that occurs under this authorization is not expected to have a negative effect on the overall status and recovery of the species. Projects resulting in temporary habitat disturbance usually impact only a small portion of available suitable snake habitat at the site and this habitat will be restored to original or better condition at the conclusion of the activity.
8. The Department will apply the principles of adaptive management to this Consultation project. As the collective knowledge base of the Butler's gartersnake evolves, the conditions of this authorization will be reviewed and modified accordingly.
9. The taking authorization shall apply only to activities that do not inhibit or compromise the long-term conservation and recovery of the species. The Department reserves the right to require individual incidental take authorization if it deems it is warranted.
10. Incidental take of the Butler's gartersnake (*Thamnophis butleri*) as a result of activities meeting the conditions described above is not likely to jeopardize the snake's continued existence and recovery, or the whole plant-animal community of which it is a part within the state; and the activity is not likely to result in the destruction or adverse modification of habitat that is critical to the continued existence of the species within the state, if the Conservation Measures referenced above are implemented.
11. The Department has complied with s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code.
12. The Department issued a public notice dated February 25, 2004 and closing on March 26, 2004 that described the proposed incidental take. DNR provided the public notice to the news media throughout the state, to the parties listed in NR 27, and to other parties who have requested in writing to receive incidental taking notices. In addition, the Department held a public informational hearing on the proposed authorization on March 16th, 2004 in Waukesha. Written and verbal public comments were submitted to the Department.

The following changes were made to the proposed authorization as a result of public comment and the continued development of the overall Butler's gartersnake Conservation Strategy:

- Maintenance activities for utility facilities were added to the activities covered under the authorization. Management Guidelines were also added to minimize take that may result from habitat modifications.
- Suitable habitat patch sizes covered under the authorization were increased.
- Clarifications of lands not considered as suitable habitat (specifically agricultural lands).

This current authorization covers only those projects that may result in temporary habitat disturbance – the remainder of the proposed incidental take authorization, specifically the 3-tier conservation strategy, is still under formal review.

13. The Department has concluded that the proposed activities covered under this broad incidental taking authorization will provide benefits to the public health, safety and welfare.

CONCLUSIONS OF LAW

1. The Department has the authority pursuant to s. 29.604 (6r), Stats., to authorize the incidental take of state Endangered or Threatened species.
2. The Department has complied with appropriate statutes and administrative rules in making this decision.

ORDER

Persons and their employees, agents and contractors, are authorized to incidentally take the Butler's gartersnake (*Thamnophis butleri*) provided that the conservation measures and conditions identified in paragraph six of the above listed Findings of Fact are met.

APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes, administrative rules and case law establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to sections 227.52 and 227.53, Stats., you must file a petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

This 3rd day of August, 2004

State of Wisconsin
Department of Natural Resources
For the Secretary

By: Sign L. Holtz for Laurie Osterndorf
Laurie J. Osterndorf
Administrator
Division of Land
Wisconsin Department of Natural Resources